

MICROSCOPICAL SOCIETY.

March 18, 1846.

A paper by the Secretary, John Quekett, Esq., "On the intimate Structure of Bone in the four great Classes of Animals, viz. Mammals, Birds, Reptiles and Fishes, with some Remarks on the great Value of the Knowledge of such Structure in classifying minute Fragments of Fossil Organic Remains," was read.

After alluding to the highly important results obtained by Prof. Owen, with the aid of the microscope, in determining the affinities of extinct animals by means of their teeth, the author went on to state that, having for some time paid considerable attention to the structure of bone in the four great classes of animals, he had found certain characters peculiar to each great class, by which a bone of one class could be distinguished from that of another. He then briefly described certain characters which were present in all bones, and then those which were peculiar to each class, viz. the Haversian canals, and the bone-cells with their little tubes (canaliculi) proceeding from them; and he applied the characters derived from the bone-cells to the determination of the class of animals to which any minute fragment may have belonged; for he had ascertained that the bone-cells were smallest in birds, a little larger in mammalia, and largest of all in the reptilia: the bone-cells of fishes were remarkable for their being so unlike either of the three preceding classes, that, having been once seen, they could not easily be mistaken. The author then noticed the relative proportions of the bone-cells and blood-corpuscles of the same animal, and concluded by remarking, that however different the size of animals of the same class may be, the bone-cells did not vary according to the difference in size. Thus the mighty iguanodon, some scores of feet in length, had no larger bone-cells than the lowliest lizard which we trampled under our feet, nor the horse or the ox than the smallest of our quadrupeds, the mouse.

 MISCELLANEOUS.

CHAIR OF ANATOMY AT EDINBURGH.

WE are happy to hear that Mr. John Goodsir has been elected to the important office of Professor of Anatomy in the University of Edinburgh. The original and highly philosophical essays of that gentleman have gained him an European reputation as an anatomist and physiologist, whilst his services in the cause of natural history have placed him in an equally high position as a biologist. His memoirs on the *Amphioxus* and *Orthogoriscus*, on the anatomy of many mollusca, radiata and entozoa, and on certain vegetables parasitic on animals, are familiar to the readers of the 'Annals.' Anatomy and natural history will equally gain by this excellent appointment.